"PROFESSIONAL COMPETENCE OR OBSOLESCENCE — WHICH?"

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"In all things let me be content,
In all but the great Science of my calling
Let the thought never arise
That I have attained to enough knowledge.
But vouchsafe to me ever
The strength, the leisure and the eagerness
To add to what I know.
For Art is great,
And the mind of man ever growing."
—from The Physician's Daily Prayer
(Maimonides 1135–1204 A.D.)

A Good Doctor Never Graduates!

MAY I present Dr. Obsolescing Smith and Dr. Competent Smith ? Both are qualified and registered to practise the healing art on the basis of existing legal requirements. Fifteen years ago both completed the first phase of their medical education and received their respective medical degrees. Dr. O. Smith graduated finally and irrevocably. With joyous abandon he severed, for good and all, the shackles of further learning and study. Now, fifteen years later, his few medical books of graduation vintage remain unopened, gathering dust on display in his consulting room for his patients to observe and be duly impressed by their appearance of seeming weighty erudition. He subscribes to no medical journals. He attends no scientific medical meetings. He never enters a hospital to care for a patient; and to enrol in a postgraduate refresher course would never enter his head. The advances of modern medicine have long since passed him by and left him a beached, derelict hulk of professional obsolescence.

By contrast, Dr. C. Smith, the up-to-date, scholarly, compassionate, interested, available, unhurried, painstaking, competent doctor, has never really graduated. It is true that he enjoyed a memorable, pleasant, academic ceremony in the presence of the hierarchy of the university medical school establishment resplendent in their colourful robes, but for him that moment in time was just the beginning of the next phase of his medical education – the forty-year long continuum of

scholarly, postgraduate endeavour in fulfillment of the deep sense of trust for his patients and their families which his exemplary medical school and its teachers had imprinted upon the conscience of his developing mind while under their care during his critical attitude-forming undergraduate days at the university.

To which Dr. Smith should a patient and family, burdened with illness, turn for care in their distress? Dr. Obsolescing Smith or Dr. Competent Smith?

Lifelong Scholarly Endeavour

The good doctor, the competent physician, is moved throughout life by a strong sense of scholarly trust and compassion to pursue, ceaselessly, the quest for new knowledge and new skills to the end that his trusting patients may be well cared for. This concept of lifelong learning is not new. Good physicians throughout the ages have been avid lifelong learners. Witness the plea of the great physician-rabbi-philosopher, Moses Maimonides, 800 years ago in his prayer for "the strength, the leisure and the eagerness" to add to his fund of knowledge. Lord Lister[1] affirmed for his generation that "If you are not willing to learn and unlearn all your life through, you should give up medicine and take up a third-rate trade." William Henry Welch[2], Osler's colleague and contemporary at Johns Hopkins University, restated the concept that "Medical eduction is not completed at the medical school: it is only begun."

Although this view is not new it has been given new impetus during recent years by growing dynamic forces of great complexity in our society. These forces are legion in number. For the hard-pressed, over-worked doctor they compound the problem of keeping abreast of the times. The provision of high quality health care today involves an increasingly intricate delivery-of-service mechanism; a Niagara of new medical knowledge pours forth; the expanding horizons of the biological, social and engineering sciences have an immediate relevance to the suffering of mankind; specialization at all levels of health care is the order of the day; new understanding of the teaching-learning process adds to the efficiency of study techniques and the adoption of innovation; and still that yawning canyon gapes, widely and deeply, between the new knowledge, skill and technology within our reach and its beneficent application for man's ills. In 1962 the President of the United States of America, the late John F. Kennedy, in addressing Congress[3] considered the matter of such national importance to government and the people that he placed on record his personal view that,

> "The accumulation of knowledge is of little avail if it is not brought within reach of those who can use it. Faster and more complete communication from scientist to scientist is needed, so that their research efforts reinforce and complement each other; from researcher to practising physician so that new knowledge can save lives as swiftly as possible; and from the health professions to the public so that people may act to protect their own health."

To the foregoing forces is added yet another – the growing public, professional and governmental concern about the competence of doctors. In 1967 the National Advisory Commission on Health Manpower suggested, in its report to President L. B. Johnson, that periodic re-examination and re-licensing may be the only way to insure "that a practitioner's knowledge reflects the most advanced results of medical progress." Commission member Dwight L. Wilbur, an internist and the

president-elect of the American Medical Association, stated that, "Naturally, there will be resistance to licensing from doctors." However, Dr. Wilbur, for one, sees logic in the recommendation, pointing out that "What one learns in medical school is often not applicable ten years later."[4]

Professional competence or obsolescence – which? This is the question of the day. The answer is of first moment to the future doctors now in the making and their teachers in medical schools, to physicians now in practice and to the public who must be assured of the finest and highest quality health care that our advanced scientific society is now capable of producing for them.

A Taxonomy of Scholarly Endeavour

There is a viewpoint prevalent among medical teachers and physicians to the effect that short postgraduate courses are the encompassing beginning and the end of continuing education, and that the number of courses presented by a medical school and the number attended each year by the practising doctor is a full measure of achievement in keeping up to date. It is doubtful if salvation cometh from the postgraduate course equivalent of the dutiful, somnolent passivity of resting in a pew on Christmas and Easter Sunday each year.

Continuing postgraduate medical education is a scholarly way of life, the sole purpose of which is the ultimate provision of constantly improving, high-quality patient care thereby assuring abundant national health and vigour.

If continuing medical education is not a short course but a scholarly way of life, then the question may well be asked – What is its nature and scope? What guidelines can be delineated to assist the practising physician to plan his own programme of life-long learning? In order of decreasing rank, though all are of essential importance, five basic forms of continuing medical education are suggested. This guideline, "Taxonomy of Scholarly Endeavour", modified from the Vollan Report[5], provides a scale by which a doctor, teacher, medical school, hospital, medical community, or nation may measure achievement in continuing medical education.

Continuing postgraduate medical education is :

1. The scholarly habit of planned daily reading and study in a home library-sanctuary as an integral part of a doctor's work-day; *and* it is
2. The periodic return every three to five years for three months or more of intensive study in the teaching hospital to reinforce scholarly motivation and attitudes and to acquire new skills and knowledge; *and* it is
3. The day-to-day informal and formal colleague-association in patient care in the community and teaching hospital, in group practice and by consultation; *and* it is
4. The attendance at scientific sessions of learned professional societies, always associating such participation with relevant *pre-session and post-session reading and study in the home library-sanctuary; and* it is
5. The attendance at short courses which incorporate in their design a *pre-course and post-course guided reading programme to be undertaken in the home library-sanctuary.*

The five components of the foregoing taxonomic list constitute an indivisible unit of continuing education endeavour in which the amalgam that binds the components

together is *self-learning* – the studious, planned hours spent by the physician in his home library-sanctuary.

Because the ultimate goal of continuing education is the provision of high-quality care, each doctor will relate his own personal programme of continuing education to the specific needs and specific problems of his patients. Consequently, the application of the "taxonomy" will produce for each physician a highly individualized programme. He alone can set his own curriculum. He alone can select or reject what is relevant or irrelevant to the best care of his patients. He alone can be moved with a sense of compassionate trust to seek out for the benefit and comfort of his trusting patients the advances in the basic medical, clinical, behavioural, biological and engineering sciences which will best promote their health, prevent their illness, cure their disease and alleviate their suffering.

The Home Library-sanctuary

Like the constantly progressing depreciation of the purchasing value of money, professional obsolescence is an unremitting, relentless, erosive process which demands astute, planned, continuing, corrective action. For the doctor this means : adequate time, the quietude of a home library-sanctuary, and a collection of carefully selected, reliable book and periodical resources on the library shelves, so that he may studiously accomplish three distinct acts of personal continuing education :

1. *Identify* new information relevant to the care of his patients.
2. *Reinforce,* by periodic review, previously acquired essential knowledge before it slips silently from the grasp of his conscious recall.
3. *Discard* that which is no longer relevant to the good care of his patients.

Stelson[6], of the Carnegie Institute of Technology, in reference to obsolete engineers concludes :

> "New knowledge in the field is developing so rapidly that a practising engineer must spend about 10 per cent of his time extending his knowledge just to maintain his relative position in the profession. But this figure assumes that he retains all his previous training, an achievement rarely encountered. Therefore, a more realistic estimate is that he must spend 20 per cent of his time acquiring new knowledge if he wishes to maintain his value to his employer and to society. If he wants to forge ahead, he will probably have to devote about one-third of his time and energy to self-education and improvement."

If this is true for engineers, how much more so for doctors entrusted with the life of patients. It is suggested that *for a good doctor, not less than one hour a day or half-a-day a week is a bare minimum of time for the reading and study necessary to ward off professional obsolescence.*

Schisgall[7], in "What You Can Do With An Hour a Day", telling of what some distinguished world figures have accomplished, states :

> "If you devote but one hour a day to an engrossing project you will give it 365 hours a year, or the equivalent of more than 45 full working days of eight hours each. This is like adding one and a half months of productive living to every year of life! Yet, when I talk about an hour a day of privacy for self-development, the reply is apt to be : 'I'm too busy. I work all day. When I come home I'm exhausted. I want some time with the children.'

Admittedly, it is not easy. It requires resolution. The trick is to create the hour, then use it wisely."

The Teaching-hospital Sabbatical Pilgrimage

The value of a periodic return to the teaching-hospital environment cannot be over-emphasized. This learning experience should be a *sabbatical must* every three to five years. Freed from the pressures of practice for three months or more, it "recharges the batteries" of scholarly motivation; it reinforces good practice attitudes and habits; it provides an opportunity to acquire new skills – diagnostic, therapeutic, operative; it re-exposes to the stimulus of academic-level ward rounds, conferences and seminars; it opens the doors to rich library resources; and it involves the physician in formal and informal personal confrontation with the enquiring minds of teachers, research scientists, fellows, residents and interns.

This essential form of postgraduate education must of necessity be highly individualized. For each doctor, the three-month or longer experience will be specially designed to meet the special needs of his patients and to suit his own personal interests in practice. Nepotism, provincialism or even nationalism should not be determining factors in the decision of where a doctor will seek this continuing education. He should select what, for him and for his patients, is the very best teaching hospital or series of hospitals, wherever situated on the face of the earth.

Peer Association in Learning

There is a tendency to overlook the very substantial amount of continuing education that goes on unobtrusively from day to day, year in, year out, through the informal and formal association of doctors in the course of caring for their patients. It takes place by the bedside, in the hospital corridor, over cups of coffee, in the group-practice office suite, by local and long-distance phone, and it not infrequently spills over at the "19th hole" or intrudes at an after-five party. "Wherever two or more are gathered . . . " to paraphrase Holy Writ, doctors will probably be talking, among other things, about patient-care problems.

More formally, in the community hospital, destined, I most sincerely hope, to assume a major and increasingly important role in postgraduate medical education, activities such as ward rounds, medical staff meetings, clinico-pathological and radiological conferences, tissue committee studies, medical audits of patient care, serial patient-management reviews, journal clubs, etc., are invaluable learning experiences which constantly up-grade the quality of care not only in the hospital but also in the office practices of the medical staff and thereby in the entire community served by the hospital.

This is a crucial and overwhelming argument for making absolutely certain that family physcians are a part of and play a significant role in every hospital.

The consultation, whether by personal confrontation, by letter or by telephone, continuously and imperceptibly diffuses innovation and leavens the quality of patient care. Reliable information on the latest and proved new drug, its use, its dosage and its dangers, is but seconds away from every doctor. It is as close as the phone that associates the enquiring doctor with his answering professional peer resource, be he 100 yards or 100 miles distant. The telephone, bringing two physicians together in therapeutic enquiry, is one of the most valuable single

devices in the field of new drug continuing education. "When in doubt phone a professional peer resource for reliable information on new drugs!" – this should be a guiding therapeutic principle for every doctor if he wishes his trusting patients to have the unbiased best and safest drug at the lowest cost.

The growth of group practice facilitates the diffusion of new knowledge and the acquisition of new skills among group-practice colleagues through personal association in the office suite and by sharing patient-care responsibilities in the community hospital. A further continuing education benefit of group practice is the opportunity it provides periodically for each member of the group to attend the scientific sessions of learned professional societies and short courses. Further, group practice makes it easy for the sabbatical return of its members, periodically, to the teaching hospital.

The Learned Medical Society in Scientific Session

Few professions can equal the degree of vigour and amount of scholarly endeavour which takes place annually in the scientific sessions of its numerous learned medical societies – local, regional, national and international – which convene to deliberate on advances in the basic medical, clinical and related sciences. Its favourable impact on the quality of patient care must be immeasurably great and beneficient. The "taxonomy" presented underlines that the value of each session would be substantially enhanced by pre-session distribution (six weeks ahead at least) of all papers, or an outline of each, with related key references. This would permit each physician using his home library-sanctuary to review the subjects and would prepare him to participate with searching intelligence during the discussion periods of the scientific meeting. Implicit in this concept is the view that scientific sessions generally might be more productive and stimulate more pre-session and post-session reading and study if the sessions were designed to allow more small-group exchange of views.

Short-course Galvanic Stimulation

"Many who are first shall be last and . . ." Thus it is with the short or refresher course in the taxonomic hierarchy of continuing education endeavour. This is not to deny the great value of the increasingly popular short course. More and more first-class courses are being made available to the practising physician. This is most praiseworthy. Often, however, a short course appears to be an exercise devoid of cerebration in which, hour after hour, row upon row of satiated, somnolent physicians are soothed and sedated by the susurrous sound of lengthy pontification intoned from a podium.

As with the scientific sessions of the learned medical societies, the value of short courses lies in associating each subject presented with a short but highly relevant list of *practical* references for pre-course and post-course reading. Short course subjects should always be meaningful in terms of the common needs of the patients of the doctors for whom the learning experience is being designed. In planning a course, two basic questions should be posed : What common disorders of the family group in the community concerned are being badly or poorly managed? What practical innovations, the product of scientific advance, should be introduced to improve the health care of the family group in the community? Half the course,

and preferably much more, should be participative, thus enabling the practising doctors in small groups to set the agenda by the questions they direct to the teachers.

Above all, each teacher should be aware that participation in a short course is a very special teaching task. The teacher is not dealing with a captive undergraduate audience regimented in rows on schedule. He faces a group of physicians meaningfully and deeply involved every day in the drama of patient life and death – physicians who freely occupy the rows and pay a fee to do so! This requires of the teacher many hours of study in his own home library-sanctuary, poring over Miller's "Teaching and Learning in the Medical School"[8] and Verner's "Adult Education"[9]. These basic references on the teaching-learning process are very relevant to his important contribution to a short course.

The short course should be recognized for what it is – simply and only, a brief, episodic, galvanic learning stimulation which is an utter waste of time for the doctor and teacher alike unless it motivates the doctor to continuous, enquiring, prying pursuit of new knowledge and new skills for the sole purpose of bringing the benefits of scientific innovation to his trusting patients.

A Scholarly Way of Life

Through the centuries the scholarliness of countless physicians, generation upon generation, has conferred upon the medical profession as a whole the recognition of a privileged position among the three time-honoured learned professions. Today this quality of scholarliness has become of public moment and expediency. What a physician does or does not do is increasingly in the white light of peer and public scrutiny. His patterns of practice and the quality of his patient care are now being observed, measured and assessed by the cybernetic monsters in the medicare offices of government. This process of evaluation is likely to increase. As it reveals and defines instances of failure to bring the benefits of modern advances to patients, it will undoubtedly prod, encourage and perhaps stimulate certain physicians who have failed their trusting patients to begin a planned programme of keeping up to date.

The mounting public interest in physician competence is such that world leaders, including Ashby in the United Kingdom[10], quoted editorially on "Selection and Obsolescence", and Gundersen[11], in 1959 as the then President of the American Medical Association speaking on "Medical Responsibilities in a Changing World", have raised the issue of conditional licensure to practise with renewal based on evidence of continuing scholarly pursuit. The threatening goad of conditional licensure may frighten and coerce some obsolescent physicians into studious ways, but let it be said and underlined that compassion and a sense of trust for patients have been, are, and always will be the only enduring and effective forces that move a good physician to be a life-long learner on behalf of his trusting patients. Of "the goodness of the physician", Hippocrates wrote long ago that: "Where there is love of man, there is also love of the art." This is the beginning and end of all postgraduate medical education.

A Good Doctor is not a Soloist !

Today a good doctor is just one member of a health care team – a team that is steadily growing in numbers, in specialization of functions and in sophistication of skills. Today a doctor can no longer practise unto himself and provide his patients with high quality care. He cannot fulfill the trust of his high calling unless he assures his patients of the special skills and dedicated devotion of the large group of health care colleagues who constitute the essential membership of the modern health care team.

Within living memory the doctor's sole associate in the delivery of health care was his horse. Then came the doctor's first team colleague – the nurse. As the product of science and technology began to pour forth in full flood the ratio of one doctor to one nurse steadily changed until in many communities the ratio is now one doctor to at least 15 other health care professionals.

During the past ten years the concept of the health sciences team as the new primary functional unit in the provision of health care has captured the attention of medical schools, teaching hospitals, health departments, the health science professions and the public generally. Witness the great new health sciences centres arising across the face of the earth dedicated to the view that high quality health care can only be provided by the cooperative, coordinated endeavour of many well-trained, highly qualified, experienced men and women using the proven new advances of all the sciences.

In 1968 a Division of Continuing Education in the Health Sciences was established at The University of British Columbia. Representatives of eleven health sciences on campus began to organize and function together in common accommodation, with common programming activities, as a continuing education leader group. This group included a representative from dentistry, hospital administration, library science, medicine, nursing, nutrition-dietetics, occupational therapy, pharmacy, physiotherapy, psychology, social work and a member responsible for developing the concept of interprofessional undergraduate education in the UBC health Sciences Centre.

This group, being unable to identify a published definition of a "health sciences team", set as its first team-task the construction of one which would embody Dean J. F. McCreary's basic concept for The University of British Columbia's Health Sciences Centre [12] [13]. This proved to be an invaluable melding mechanism for the health sciences continuing education leader group. After six months of philosophical consideration and dynamic exchange of views, a growing consensus produced a draft definition which portrays to some degree the general dimensions of the group's concept of a health sciences team :

> A *Health Sciences Team*[1] is a group of health professionals[2] with their respective associated technologists, technicians and other essential personnel[3], whose overall goals[4] are the promotion of health[5], the prevention of disease, the diagnosis and treatment of illness and the alleviation of suffering, who, by cooperation[6], coordination[7] and integration[8] of effort provide health care embracing the sumtotal of relevant knowledge, skill and technology produced by all the sciences[9] and as applicable by the other learned professions[10], and who recognize every healthy or apparently-well person[11], each patient, the

family and the community as integral participants in the process of providing this care.

To indicate to some extent the scope of the group's philosophical considerations in developing the foregoing draft definition an explanatory glossary with brief notes is presented :

1. *team* – set [group] of persons working together, combined effort, organized co-operation. (Oxford Concise Dictionary).
2. *professional* – (variously defined but for these purposes) a university graduate in an academic field with relevance to the provision of health care in the community, including dentistry, hospital administration, library science, medicine, nursing, nutrition-dietetics, occupational therapy, pharmacy, physiotherapy, psychology, social work and others.
3. *essential personnel* – a wide range of most important individuals including executive personnel, administrative assistants, secretarial, clerical, maintenance staff, and others.
4. *overall goals* – listed in a suggested rank order with "promotion of health" being first and paramount.
5. *health* – "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." (World Health Organization).
6. *cooperation* – to work together to the same end [goal] (OCD).
7. *coordination* – to bring [parts] into proper relation. (OCD).
8. *integration* – to combine [parts] into a whole. (OCD).
9. *all the sciences* – physical, chemical, biological, basic medical, clinical, social, computational, engineering and others.
10. *other learned professions* – architecture, education, law, religion and others.
11. *apparently-well person* – appearing healthy but presymptomatic disease revealed by skilful examination including multiphasic testing.

The foregoing will make apparent the comprehensiveness of the concept of the health sciences team, its membership, goals, supporting resources and functional principles, as envisaged by The University of British Columbia's Division of Continuing Education in the Health Sciences.

There was a day, quite a long time ago, when the doctor was a soloist occupying the centre stage all alone in the drama of life and death. That day is gone, never to return. Today, the good doctor is a lifelong learner and the active coordinator of a comprehensive health care team dedicated to the promotion of health, the prevention of disease, the diagnosis and treatment of illness and the alleviation of suffering.

This presentation began with an excerpt from a prayer by the great physician whom Sir William Osler called "the prince of Hebrew physicians". It seems appropriate that the lecture conclude with some pertinent words about continuing education from Osler himself[14]:

> "There are many problems and difficulties in the education of a medical student, but they are not more difficult than the question of the continuous education of the practising doctor. Over the medical student we have some control, over the other, practising doctor, none. The university and the licensing authorities make it certain that the medical student has a minimum, at least, of professional knowledge, but who can be certain of the state of the knowledge of the doctor in practice in five or ten years from the date of his graduation? The conditions of his existence demand that he shall be abreast of the times. The family doctor should be carefully nurtured by the medical

schools and carefully guarded by the public. Humanly speaking, with him are the issues of life and death, upon him falls the grievous responsibility in those terrible emergencies which bring darkness and despair to so many households. No class of men needs to call to mind more often the wise comment of Plato that education is a life-long business."

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